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# BEFORE THE TENNESSEE REGULATORY AUTHORITY

#### NASHVILLE, TENNESSEE

November 17, 2000

IN RE:	)
UNITED CITIES GAS COMPANY WEATHER NORMALIZATION ADJ. (WNA) AUDIT	) ) Docket No. 00-00619 )

# NOTICE OF FILING BY ENERGY AND WATER DIVISION OF THE TENNESSEE REGULATORY AUTHORITY

Pursuant to Tenn. Code Ann. 33 65-4-104, 65-4-111 and 65-3-108, the Energy and Water Division of the Tennessee Regulatory Authority (the "Energy and Water Division") hereby gives notice of its filing of the United Cities Gas Company WNA Audit Report in this docket and would respectfully state as follows:

- 1. The present docket was opened by the Authority to hear matters arising out of the audit of United Cities Gas Company (the "Company").
- 2. The Company's WNA filings were received on January 1, 2000, through April 30, 2000, and the Staff completed its audit of same on November 6, 2000.
- 3. On November 13, 2000, the Energy and Water Division issued its preliminary WNA audit findings to the Company, and on November 14, 2000, the Company responded thereto.
- 4. The preliminary WNA audit report was modified to reflect the Company's responses and a final WNA audit report (the "Report") resulted therefrom. The Report is



attached hereto as Exhibit A and is fully incorporated herein by this reference. The Report contains the audit findings of the Energy and Water Division, the Company's responses thereto and the recommendations of the Energy and Water Division in connection therewith.

5. The Energy and Water Division hereby files its Report with the Tennessee Regulatory Authority for deposit as a public record and approval of the recommendations and findings contained therein.

Respectfully Submitted:

Pat Murphy Pat Murphy

Energy and Water Division of the Tennessee Regulatory Authority



## COMPLIANCE AUDIT REPORT

OF

## **UNITED CITIES GAS COMPANY**

# WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER Docket No. 00-00619

PREPARED BY

# TENNESSEE REGULATORY AUTHORITY

ENERGY AND WATER DIVISION

NOVEMBER 2000

# COMPLIANCE AUDIT

# UNITED CITIES GAS COMPANY WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER

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#### **COMPLIANCE AUDIT**

## **UNITED CITIES GAS COMPANY**

# WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER

#### I. OBJECTIVE OF AUDIT

In its September 26, 1991, Order in Docket 91-01712, the Tennessee Regulatory Authority ("TRA" or "Authority"), formerly the Tennessee Public Service Commission, approved a three year experimental Weather Normalization Adjustment ("WNA") Rider to be applied to residential and commercial customers' bills during the months of October through May of each year. In its June 21, 1994, order, the Commission adopted the WNA Rider as a permanent rule, to be applied November through April of each year for United Cities Gas Company (See Attachment 1). The purpose of this audit is to determine if the WNA rider was calculated and applied to customers' bills correctly between November 1, 1999 and April 30, 2000.

#### II. SCOPE OF AUDIT

In meeting the objective of the audit, the Staff compared the following on a daily basis:

- 1) The Company's actual heating degree days to National Oceanic and Atmospheric Administration (NOAA) actual heating degree days;
- 2) The Company's normal heating degree days to the normal heating degree days calculated in the last rate case; and
- 3) The Company's calculation of the WNA factor to Staff's calculation. The Staff also audited a sample of customers' bills during the WNA period to verify that the WNA factor had been correctly applied to the bills.

Pat Murphy and Butch Phillips of the Energy and Water Division conducted this audit.

# III. BACKGROUND OF WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER

In setting rates, the Tennessee Regulatory Authority uses a normalized level of revenues and expenses for a test year, which is designed to be the most reasonable estimate of the Company's operations during the time the rates are to be in effect. Use of normalized operating levels eliminates unusual fluctuations that may occur during the test period, which causes rates to be set too high or too low.

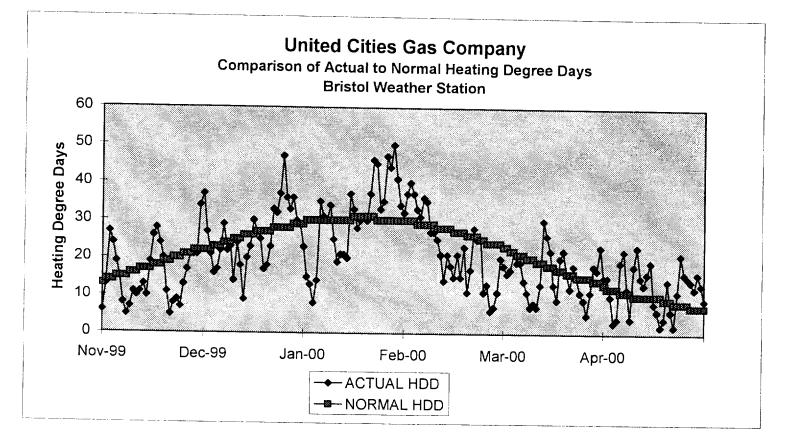
Specifically, one part of normalizing revenues consists of either increasing or decreasing the test year weather related sales volumes to reflect the difference between the normal and actual heating degree days. (A heating degree day is calculated as the difference in the average daily temperature and 65 degrees Fahrenheit.) This average daily temperature constitutes normal weather and is determined based on the previous thirty years weather data.

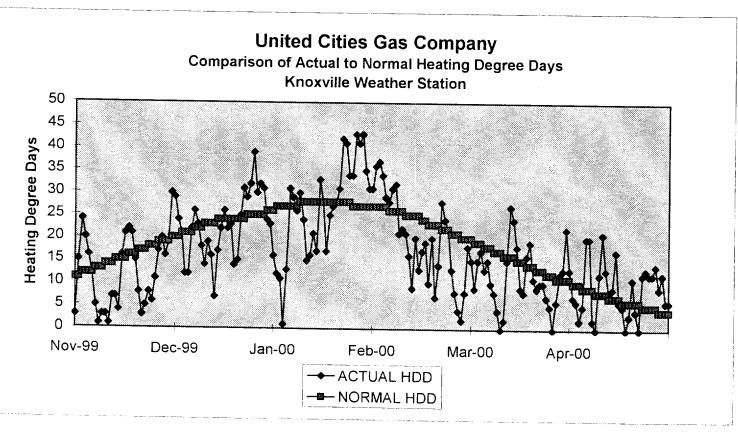
However, normal weather rarely occurs. This has two impacts:

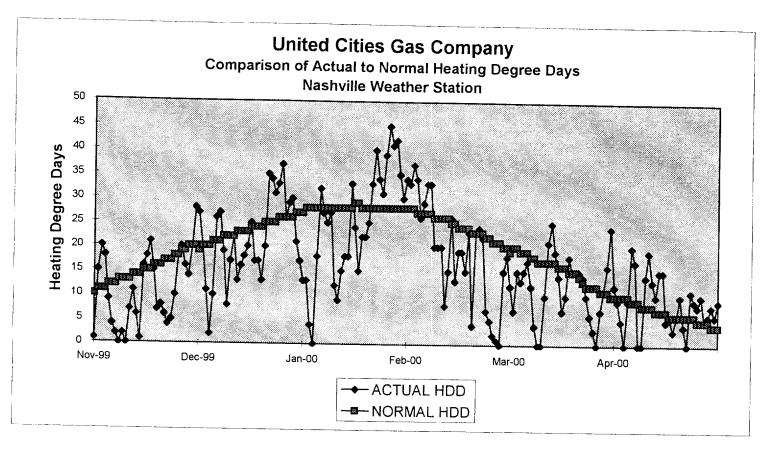
- 1) The customers' bills fluctuate dramatically due to changes in weather from month to month.
- 2) The gas companies earn more or less than their authorized rate of return. For example, if weather is colder than normal, then more gas than anticipated in the rate case will be sold. This results in higher customer bills and overearnings for the company. On the other hand, if weather is warmer than normal, less gas than anticipated in the rate case will be sold, the customers' bills will be lower and the company will underearn.

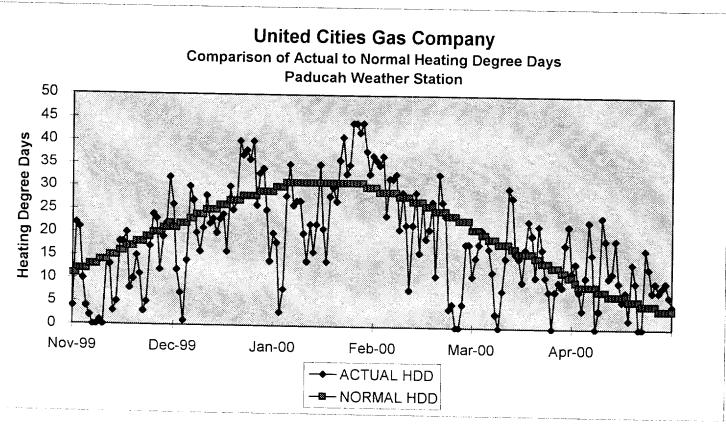
In recognition of this fact, the TRA approved an experimental WNA mechanism, which became permanent on June 21, 1994, to reduce the impact abnormal weather has on the customers' bills and on the gas utilities' operations. In periods of weather colder than normal, the customer receives a credit on his bill, while in periods of warmer than normal weather, the customer is billed a surcharge. Thus, customers' monthly bills should not fluctuate as dramatically and the gas company should have a more stable rate of return.

The following graphs show a comparison of actual heating degree days to normal heating degree days for United Cities Gas during the 1999 - 2000 heating season, in each of its four service areas.









#### IV. IMPACT OF WNA RIDER

The net impact of the WNA Rider during the November 1, 1999 through April 30, 2000 period was that residential and commercial customers were **surcharged** \$1,749,787 and \$801,525 respectively. This equates to increases in revenues from residential and commercial sales of 6.80% and 4.58% respectively. (See Table 1) This is up from the previous year when the residential and commercial customers were **surcharged** \$1,451,572 and \$687,328 respectively. (See Table 2)

Table 1			
	A Rider on Resident November 1, 1999 - A		Revenues
	WNA Rider <u>Revenues</u>	Total Revenues	Percentage Impact of WNA Rider On Revenucs
Residential Sale	\$1,749,787	\$25,719,664	6.80%
Commercial Sales	801,525	17,491,256	4.58%
Total	\$2,551,312	\$43,210,920	5.90%

Table 2		charged (Refunded) 197 - 2000	
	Residential	Commercial	Total <u>Surcharge/Refund</u>
11/97-4/98	\$ 341,642	160,542	\$ 502,184
11/98-4/99	1,451,572	687,328	2,138,900
11/99-4/00	1,749,787	801,525	2,551,312
Total	<u>\$3,543,001</u>	\$1,649,395	\$5,192,396

#### V. BACKGROUND INFORMATION ON THE COMPANY

United Cities Gas Company ("UCG"), with its principal office at 810 Crescent Centre Drive, Franklin, Tennessee, is a division of Atmos Energy Corporation, located in Dallas, Texas. UCG is a multi-state gas distributor, providing service to multiple communities in Tennessee. The gas to serve these areas is delivered by four natural gas pipelines in accordance with separate and individual tariffs approved by the Federal Energy Regulatory Commission. The four interstate pipelines are East Tennessee Natural Gas ("ETNG"), Texas Eastern Transmission Corporation (TETC), Columbia Gulf Transmission Corporation ("CGTC"), and Texas Gas Transmission Corporation ("TGTC").

ETNG provides service to UCG in Tennessee for the Columbia, Shelbyville, Lynchburg, Maryville-Alcoa, Morristown, Bristol, Elizabethton, Gray, Greeneville, Johnson City, and Kingsport areas.

TETC and CGTC provide service to UCG in Tennessee for Murfreesboro, Nolensville, Franklin, and adjacent areas in Rutherford and Williamson Counties.

TGTC provides service to UCG in Tennessee to Union City and adjacent areas in Obion County.

#### VI. WNA FINDINGS

The Staff's audit results showed a **net overrecovery** from UCG's ratepayers in the amount of \$14,572. This overrecovery resulted from three findings, which are summarized below.

#### SUMMARY:

	NET RESULT	<u>\$14.572</u>	Overrecovery
FINDING #3	WNA billed in May 2000	70,522	Underrecovery
FINDING #2	WNA billed in September 1999	935	Underrecovery
FINDING #1	Inaccurate Actual Heating Degree Days And Billing errors	\$86,029	Overrecovery

#### FINDING #1:

#### **Exception**

The Company used inaccurate actual daily heating degree days in the calculation of the WNA factor. In addition, the Company experienced billing errors associated with the billing of the WNA surcharge (refund) during the WNA period.

#### Discussion

The audit period consists of 852 weather observations (213 days in the period times four weather stations). Our audit indicates that the Company used inaccurate actual daily heating degree days in the calculation of the WNA factor on 35 days of the WNA period. These inaccuracies are usually due to the fact that the daily heating degree days published in NOAA's Local Climatological Data are different from the daily heating degree days that the Company obtains for these particular days from the local NOAA weather stations. In other instances, weather data is inaccurately input into the Company's computer.

On approximately September 1, 1999, the Company converted to a new billing system. The conversion was made to upgrade the billing system as well as make it Y2K compliant. With that computer conversion, the method that the Company uses to arrive at daily heating degree days changed. They no longer input the degree days obtained from the weather station. Instead the degree days are calculated using the high and low temperature each day that are obtained from the weather stations. The Company states they identified a problem with rounding in the formula, which was not corrected until late November. Since most of the differences noted below are in October, it seems reasonable that this was a contributing factor.

The days involved were:

Weather Station	Date	Daily Degree Days Used By Company	Daily Degree Days As Published By NOAA	Degree Day Difference
Paducah	10/05/99 10/14/99 11/19/99 12/21/99 01/03/00 02/10/00 03/11/00	15 10 5 38 7 7 25	14 9 10 40 8 8 8	-1 -1 +5 +2 +1 +1 +5 +12
Nashville	10/05/99 10/06/99 10/14/99 10/15/99 10/17/99 10/23/99 11/14/99 12/21/99 01/04/99	10 9 8 4 8 19 0 34 17	9 8 7 3 7 17 1 35	-1 -1 -1 -1 -1 -2 +1 +1

Weather Station	Date	Daily Degree Days Used By Company	Daily Degree Days As Published By NOAA	Degree Day Difference
	01/07/00 01/09/00	23 16	25 12	+2 -4 -6
Knoxville	10/03/99 10/07/99 10/14/99 10/15/99 10/17/99	1 5 5 5 2	0 4 4 4 1	-1 -1 -1 -1 -1 -5
Bristol	10/02/99 10/06/99 10/08/99 10/11/99 10/12/99 10/14/99 10/15/99 10/17/99 11/11/99 11/25/99 12/14/99 04/03/00	6 11 5 1 3 11 7 4 11 8 17 3	5 10 4 0 2 10 6 3 10 13 20 4	-1 -1 -1 -1 -1 -1 -1 -1 +5 +3 +1
			Total	+1

In addition to the degree day differences identified above, the Company has experienced a number of billing errors. As stated above, the Company converted to a new billing system. With the change came many technical problems that the Company's employees had to work through. Problems experienced during the months of November 1999 through January 2000 are summarized as:

- 1. Some cities were cross-referenced to the wrong weather station degree days.
- 2. In some instances degree days were not pulled from any weather station and thus no WNA factor calculated.
- 3. Technical problems with the reports generated.
- 4. Rate codes not picked up leading to no WNA factor calculated.
- 5. Rounding problems in the formula for calculating the degree days.

The net result of the Company's billing based on inaccurate data is that the customers were **overcharged \$86,029**. Refer to Section VII, <u>Recommendations and Conclusions</u> on page 10 for further discussion of the Company's billing problems.

#### **Company Response**

The Company agrees with this finding. See Attachment 2.

#### FINDING #2:

#### Exception

Customers were billed a WNA adjustment in September 1999, which is outside the WNA period.

#### **Discussion**

In September 1999, bills were run with the WNA calculation. The result was 29,236 customers were incorrectly billed a WNA adjustment. The Company attributes this error to the technical difficulties that were experienced with the new billing system. The amounts billed to individual customers were small. In the majority of customers (22,124 out of 29,236 total customers), the billed surcharge (credit) amounted to less than \$0.25 per customer. This is due to the fact that the number of heating degree days for the latter half of August through September is very small and usage is minimal.

The Company proposed that those customers billed a WNA adjustment greater than or equal to \$0.25 would receive a reversing adjustment on their bills. The amount of the total adjustment would be approximately a net \$8,800. For those customers billed less than \$0.25, the net adjustment would be rolled into the net findings during the audit of the WNA mechanism. Staff agreed that this proposal was reasonable.

The net result of the Company's September billing error is that the customers were undercharged \$935.

#### Company Response

The Company agrees with this finding. See Attachment 2.

#### FINDING #3:

#### **Exception**

Customers were billed a WNA adjustment in May 2000, which is outside the WNA period.

#### Discussion

Similar to the problem discussed in Finding #2, the Company's billing program continued the WNA calculation into the month of May. The end of the winter heating season for United Cities is April. Due to weather that was colder than normal, these customers received net credits in the amount of \$70,523. Therefore United Cities undercollected \$70,523 from its customers.

#### **Company Response**

The Company agrees with this finding. See Attachment 2.

#### VII. <u>RECOMMENDATIONS AND CONCLUSIONS</u>

Since the implementation of the permanent Weather Normalization Adjustment Rider ("WNA Rider") in 1994, all three major LDC's under the Authority's jurisdiction have complied with the filing requirements and Staff has experienced no trouble auditing these WNA adjustments. However, during this heating season, which began on November 1, 1999, United Cities failed to supply the required information in a timely manner. The reason for the untimely information is due to the assimilation of United Cities into the Atmos Energy corporate structure and a new billing system conversion. Atmos Energy Corporation (the parent company located in Dallas, Texas) has eliminated positions locally and moved the Information Technology ("IT") functions to Dallas. Due to technical problems associated with new computer programs, the personnel in Dallas and consultants failed to provide the Shared Services employees in Franklin, Tennessee with the information necessary (and in the necessary format) to calculate the adjustments. Consequently, the Company was unable to provide the required information to our Staff. We were three months into the heating season before information started coming through from Dallas. However, the Company discovered that the data was flawed and Tennessee customers were being billed incorrectly. The contributing factors are summarized in Finding #1. The problems were so serious that the Shared Services employees from Franklin traveled to Dallas to work with the Dallas personnel and consultants to correct the underlying problem.

Once the Company supplied data that they considered reliable to our Staff, we were able to independently calculate the WNA factors for the Company's customers. United Cities traditionally recalculates the WNA factors for all customers for the months of the heating season during the summer months, correcting all errors that have been identified. Staff then compares the results of their "true-up" with the Staff's results. In the past, there has not been a material difference between the two results and the Staff and Company have been able to reach an agreement on all issues.

During the "true-up" process this year, however, additional problems were identified that were not caught during the WNA period. The data that the Company supplied to the Staff was still flawed after the Shared Services employees thought that all errors had been identified. Consequently, Staff's analysis was flawed. To try to correct this outcome, we met with Company representatives on October 23, 2000 to discuss the results of the Company's true up. The Company provided us the supporting documentation of the corrected data for November 1999 through April 2000 and schedules calculating the \$86,029 overcollection cited in Finding #1. Staff then did a sample analysis of this corrected data to determine if we were in agreement with the Company's results. On November 9, we contacted the Company to state that we would accept the Company's results.

Staff cannot assure the Authority that the Company is correctly implementing the mechanics of the WNA Rider as specified by the TRA and included in the Company's tariff. (See Attachment 1) During the October 23 meeting with the Company, we inquired whether the Company was confident that all identified problems with the WNA process had been corrected and would not affect the coming heating season. We were told that the technical "bugs" had been addressed and corrected and the Company did not anticipate any problem with the process in the 2000 – 2001 heating season. We invited Mark Thessin, Vice-President of Rates and Regulatory Affairs, to provide us with a written statement that could be incorporated into the final audit report to assure the TRA of its continued compliance with the requirements of the WNA Rider.

United Cities is currently providing the TRA with timely data for the 2000 – 2001 heating season. The calculation of the WNA adjustments began appropriately on November 1, 2000.

Mark Thessin's statement is incorporated as Attachment 2.

The net overcollection based on the findings is immaterial (approximately \$0.13 per customer), therefore we recommend that the Company include this overcollection in its next Refund Due Customers filing with the TRA. This is the method the Company has customarily used.

Original Sheet No. 50

#### WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER

#### Provisions for Adjustment

The base rate per therm/Ccf (100,000 Btu) for gas service set forth in any Rate Schedules utilized by the Tennessee Regulatory Authority in determining normalized test period revenues shall be adjusted by an amount hereinafter described, which amount is referred to as the "Weather Normalization Adjustment." The Weather Normalization Adjustment shall apply to all residential and commercial bills based on meters read during the revenue months of November through April.

#### **Definitions**

For purpose of this Rider:

"Regulatory Authority" means the Tennessee Regulatory Authority

"Relevant Rate Order" means the final order of the Regulatory Authority in the most recent litigated rate case of the Company fixing the rates of the Company or the most recent final order of the Regulatory Authority specifically prescribing or fixing the factors and procedures to be used in the application of this Rider.

#### Computation of Weather Normalization Adjustment

The Weather Normalization Adjustment shall be computed to the nearest one-hundredth cent per therm/Ccf by the following formula:

	WNA,	=	$R_{_{i}}$	(HSF <sub>i</sub>	(NDI	D-ADD)	)	
				(BL,	+	(HSF <sub>1</sub> x	ADD)	
Where								
	i	=		Rate Scheo		billing classi ntains more		nin any such ling
WNA,		=				nent Factor f per therm/C		e schedule or
R,		=	schedule o Authority	or classifica	se rate of temperature sensitive sales for the ith ation utilized by the Tennessee Regulatory evant Rate Order for the purpose of determining revenues			ilatory

Issued by:

Thomas R. Blose, Jr., President

Date Issued: August 1, 1997
Issued Pursuant to Docket No. 96-01299

Effective Date:

September 2, 1997

### WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER (Continued)

HSF<sub>i</sub> = heat sensitive factor for the i<sup>th</sup> schedule or classification utilized by the Regulatory Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues

NDD = normal billing cycle heating degree days utilized by the Regulatory Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues

ADD = actual billing cycle heating degree days

BL<sub>i</sub> = base load sales for the i<sup>th</sup> schedule or classification utilized by the Regulatory Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues

#### Filing with Regulatory Authority

The Company will file as directed by the Regulatory Authority (a) a copy of each computation of the Weather Normalization Adjustment, (b) a schedule showing the effective date of each such Weather Normalization Adjustment, and (c) a schedule showing the factors or values derived from the Relevant Rate Order used in calculating such Weather Normalization Adjustment.

#### Heat Use/Base Use Factors

	Resident	ial	<u>Commercial</u>		
<u>Town</u>	Base use <u>Ccf</u>	Heat use Ccf/HDD	Base use <u>Ccf</u>	Heat use Ccf/HDD	
Union City	13.906292	.156369	124.595029	.453633	
Columbia Shelbyville Franklin Murfreesboro	13.035323	.173948	99.021858	.624513	
Maryville Morristown	13.886330	.153366	111.454966	.658649	
Johnson City Elizabethton Kingsport Greeneville Bristol	10.696903	.162066	169.773651	.611201	

Issued by:

Thomas R. Blose, Jr., President

**Effective Date:** 

September 2, 1997

Date Issued: August 1, 1997
Issued Pursuant to Docket No. 96-01299

# ATTACHMENT 2



Mark G. Thessin
Vice President - Rates & Regulatory Affairs

RECEIVED
TN REG. AUTHORITY

NU√ 1 5 2000

**ENERGY & WATER DIVISION** 

November 15, 2000

Ms. Pat Murphy Senior Financial Analyst Energy and Water Division Tennessee Regulatory Authority 460 James Robertson Parkway Nashville, TN 37243-0505

**RE: WNA Audit for 1999-2000** 

Winter Season

#### Dear Pat:

The following is in response to the Staff Audit and Report conducted for the WNA period of the 1999 - 2000 winter season. The Company will respond to each finding and the recommendations and conclusions on pages 10 and 11.

Finding #1 - The Company used inaccurate daily heating degrees days in the calculation of the WNA factor. In addition, the Company experienced billing errors associated with the billing of the WNA surcharge (refund) during the WNA period.

COMPANY RESPONSE: In September 1999 the Company converted to a new billing system which among other things, was designed to bring the Company into Y2K compliance. This conversion had with it the normal challenges and consequently affected the correct calculation of the WNA. When looking at the errors that occurred, and as pointed out by the Staff, they were experienced in the early months of the winter season and were corrected as the year progressed. The Company worked diligently to correct these errors, both internally and with the Staff. The last few months of the WNA season show very little variance between the billed amount and true-up amount, demonstrating that all conversion issues had been corrected. The Company agrees with the calculation of the refund in Finding #1.

- Finding #2 Customers were billed a WNA adjustment in September 1999, which is outside the WNA period.
- COMPANY RESPONSE: Due to the conversion and assimilation issues described in the Company's Response to Finding #1, the Company did incorrectly begin to charge the WNA in September 1999. At that time the Company addressed the issue with the Staff and credited to customers' bills, any customers who were charged over \$0.25 in this month. After the refunds were given, the net amount of credit incorrectly to the customers was \$935. The Company agrees with the calculation of the undercharge of \$935.
- Finding #3 Customers were billed a WNA adjustment in May 2000, which is outside the WNA period.
- COMPANY RESPONSE: The Company did erroneously continue to bill the WNA in May 2000. The Company agrees with the undercollection of \$70,523 as set forth by the Staff.

#### **COMPANY RESPONSE TO RECOMMENDATIONS AND CONCLUSIONS:**

The Company's difficulties in assimilating and converting to a new billing system gave rise to WNA errors. These errors were corrected as the WNA season went on. As pointed out by the Staff, the Company is now timely filing its data for the current 2000-2001 WNA season. In addition, the Company has repeatedly checked the current season's WNA calculations and can assure the TRA and the Staff that the calculation is running correctly and smoothly. The Company is willing to accommodate the Staff and work with them in any way they see fit, including audit procedures, to make sure the integrity of WNA calculation stays intact.

The Company thanks the Staff for giving it the opportunity to work through these issues and address the Staff report. Should you have any questions or need additional information, please feel free to contact me.

Sincerely yours,

Mark G. Thessin

VP - Rates & Regulatory Affairs

Wach p. Thissis

MGT/Ic

Cc: Allen Ashburn

Nancy Tarrant